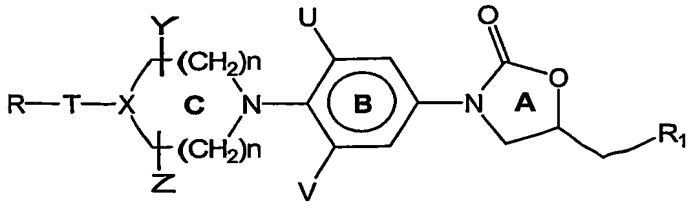
We Claim:

1. A compound having the structure of Formula I:



FORMULA I

and its pharmaceutically acceptable salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs or metabolites, wherein

T is five membered (un)substituted heterocyclic ring with exclusively one heteroatom, selected from oxygen, nitrogen and sulphur; aryl, substituted aryl, bound to the ring **C** including aryl and five membered heteroaryl which are further substituted by a group represented by **R**, wherein R is selected from the group consisting of H, CHO, C_{1-6} alkyl, F, Cl, Br,I, –CN, COR_5,$COOR_5$, $N(R_6,R_7)$, $NHCOC(R_8, R_9, R_{10})$, $NHCOOR_{10}$, $CON(R_6, R_7)$, CH_2NO_2, NO_2, $CH(OAc)_2$, CH_2R_8, CHR_9, -CH = N-OR_{10}, -C=CH-R_5, OR_5, SR_5, $-C(R_9)=C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_4, SR_4; wherein R_4 and R_5 are independently selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6 and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$; R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl;

n is an integer in the range from 0 to 3;

X is C, CH, CH-S, CH-O, N, $CHNR_{11}$, $CHCH_2NR_{11}$, CCH_2NR_{11}, wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

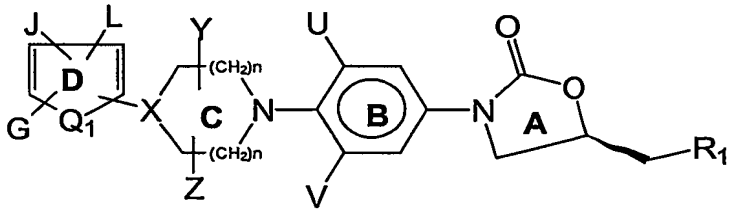
Y and Z are independently selected from hydrogen, C_{1-6} alkyl, C_{3-12} and cycloalkyl C_{0-3} bridging groups;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, preferably U and V are hydrogen or fluoro;

R_1 is selected from the group consisting of - $NHC(=O)R_2$, $N(R_3, R_4)$, $-NR_2C(=S)R_3$,

$-NR_2C(=S)SR_3$, wherein R_2 is hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH; R_3,R_4 are independently selected from hydrogen, C_{1-12} alkyl, C_{3-12} cyclo alkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH.

2. A compound having the structure of Formula II:



FORMULA – II

and its pharmaceutically acceptable salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs, or metabolites, wherein

R_1 is selected from the group consisting of (1) $-NHC(=O)R_2$; (2) $-N(R_3, R_4)$; (3) $-NR_2C(=S)R_3$; (4) $-NR_2C(=S)SR_3$ wherein R_2, R_3, R_4 are independently hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted one or more of F, Cl, Br, I, OH;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I;

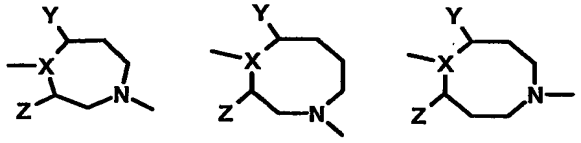
Y and Z are independently selected from (1) hydrogen, (2) C_{1-6} alkyl, (3) C_{3-12} cycloalkyl (4) C_{0-3} bridging group.

X is selected from C, CH, CH-S, CH-O, N, $CHNR_{11}$, $CHCH_2NR_{11}$, CCH_2NR_{11}; wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

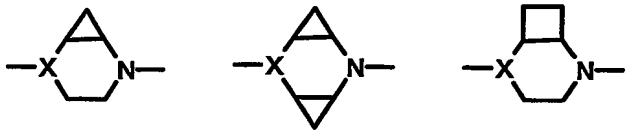
Q_1 is selected from O, S, NR_{11}, wherein R_{11} is as defined above;

G, J, L are independently selected from H, C_{1-6} alkyl, F, Cl, Br,I, –CN, CHO, COR_5,$COOR_5$, $CH(OAc)_2$, $N(R_6,R_7)$, $NHCOC(R_8, R_9, R_{10})$, $CON(R_6, R_7)$, $NHCOOR_{10}$, CH_2NO_2, NO_2, CH_2R_8, CHR_9, -CH = N-OR_{10}, -C=CH-R_5, OR_5, SR_5, $-C(R_9)=C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_4, SR_4; wherein R_5 is selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6 and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$; R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl.

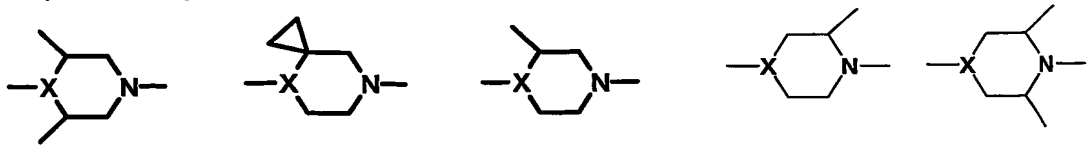
3. The compound according to claim 2 wherein in Formula II, ring C is 6-8 membered in size or of larger size and the larger rings have either two or three carbons between each nitrogen atom, comprising of:



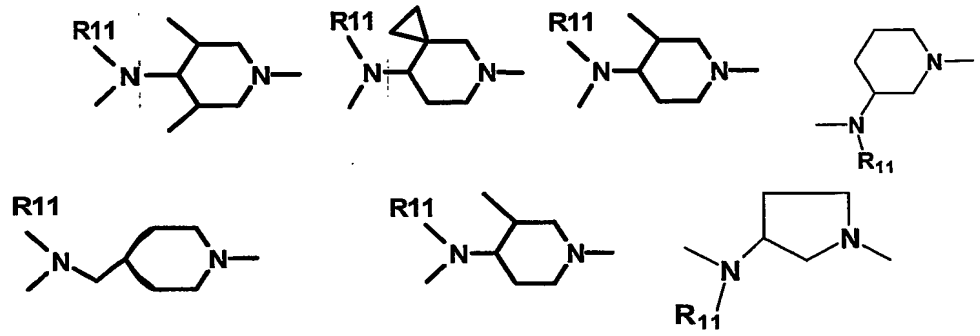
and may be bridged to form a bicyclic system as shown below,



ring C optionally substituted at positions Y and Z with alkyl groups, cycloalkyl groups, fluoro group, carboxylic and corresponding esters, amides, substituted alkyls or bridging alkyl groups as shown below:

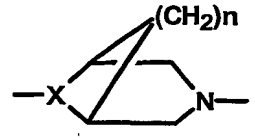


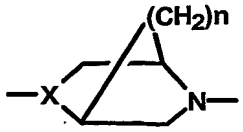
or ring C is 6 membered in size and X is -CH-(NHR_{11}), or >CCH_2NHR_{11}- which is selected from the group consisting of the following rings wherein R_{11} is the same as defined earlier,

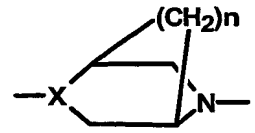


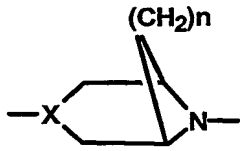
or

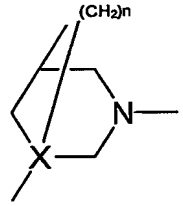
in addition to the above, ring C includes the following structures:

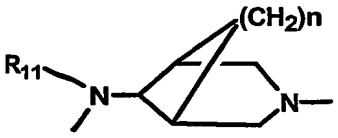


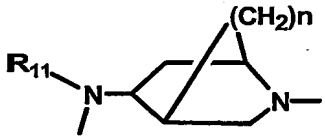


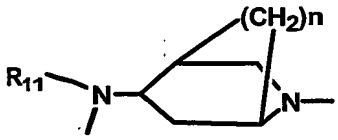


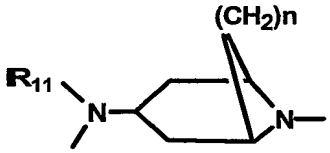


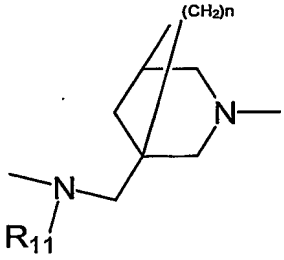




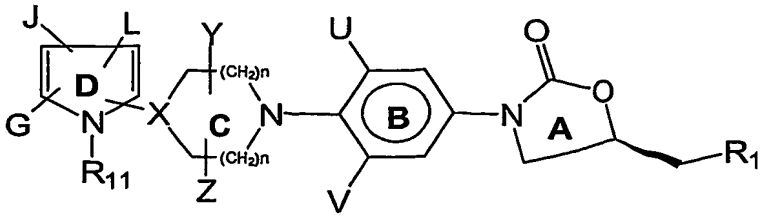




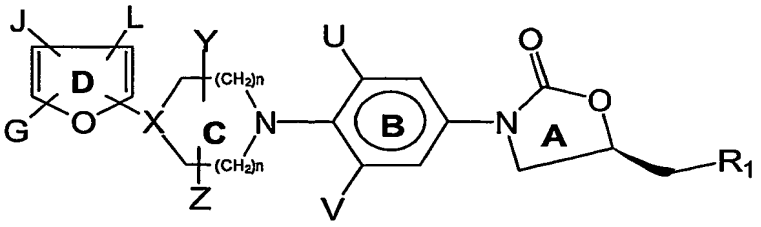




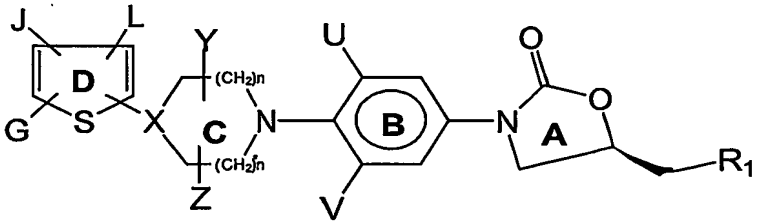
when Q_1=NR_{11}, O or S, the structures are represented by Formulae III, IV and V, respectively,



FORMULA III



FORMULA IV



FORMULA V

wherein R_1, R_{11}, U, V, X, Y, Z, G, J, L and n in Formula III, Formula IV and Formula V are the same as defined earlier for Formula II.

4. A compound selected from the group consisting of

(S)-N-[[3-[3-Fluoro-4-[4-(5-nitro-2-thienyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide (Compound No.1)

(S)-N-[[3-[3-Fluoro-4-[4-(5-formyl-2-thienyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide (Compound No.2)

(S)-N-[[3-[3-Fluoro-4-[4-(5-formyl-2-furyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide (Compound No. 3)

(S)-N-[[3-[3-Fluoro-4-[4-(5-nitro-2-furyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide (Compound No. 4)

(S)-N-[[3-[3-Fluoro-4-[4-{3-thienyl(2-nitro)-5-acetyloxy}methylacetate]-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]acetamide (Compound No. 5)

(S)- N-[[3-[4-[N-1-(5-nitro-2-thienyl) piperazinyl]-phenyl]-2-oxa-5-oxazolidinyl]-methyl]-acetamide (Compound No. 6)

(S)-N-[[3-[3-Fluoro-4-[N-1-{4-(5-nitro-2-thienyl)piperazinyl}]-phenyl]-2-oxo-5-oxazolidinyl]-methyl]-2-chloro-propionamide (Compound No. 7)

(S)-N-[[3-[3-Fluoro-4-[4-(5-nitro-2-thienyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]difluoroacetamide (Compound No. 8)

(S)-N-[[3-[-3-Fluoro -4-[N-1-(5-nitro-2-thienyl)-piperazinyl]phenyl]-2-oxo-5-oxozolidinyl]methyl]dichloro acetamide (Compound No 9)

(S)-N-[[3-[-3-Fluoro-4-[(5-nitro-2-thienyl)-3-methyl-1-piperazinyl]phenyl]-2-oxo-5-oxozolidinyl]methyl]acetamide (Compound No. 10)

(S)-N-[[3-[3-Fluoro-4-[4-(5-nitro-2-thienyl)-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]fluoroacetamide (Compound No. 11)

(S)-N-[[3-[3-Fluoro-4-[3-(1α,5α,6α)-[6-{N-(5-nitro-2-thienyl)-N-methyl}aminomethyl]-3-azabicyclo-[3.1. 0]hexane]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide (Compound No 12).

(S)-N-[[3-[3-Fluoro-4-[4-(5-nitro-2-thienyl)-1-homopiperazinyl]phenyl]-2-oxo-5-oxazolidnyl]methyl] acetamide (Compound No.13)

(S)-N-[[3-[3-Fluoro-4-[4-(5-nitro-2-furyl)-1-homopiperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide (Compound No.14)

(S)-N-[[3-[3-Fluoro-4-[4-{3-thienyl(2-nitro)5-formyl}-1-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide (Compound No.15)

(S)-N-[[3-[3-Fluoro-4-[N-1-[4-{N-methyl-N-(5-nitro-2-furyl)}- amino]-1-piperadinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide (Compound No.16)

(S)-N-[[3-[3-Fluoro-4-[3-(1α, 5α, 6α)-[6-{N-(5-nitro-2-furyl)-N-methy}aminomethyl]-3-azabicyclo [3.1.0]hexane] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide (Compound No.17)

5. A pharmaceutical composition comprising the compound of claims 1, 2, 3 or 4 and a pharmaceutical acceptable carrier.

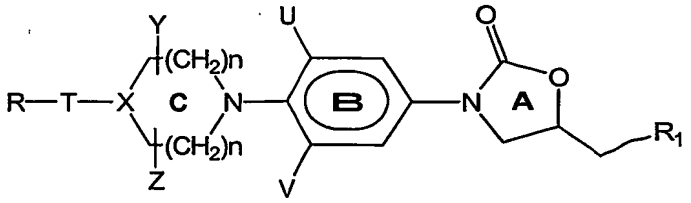
6. A pharmaceutical composition comprising a pharmaceutically effective amount of compound according to claims 1, 2, 3 or 4, or a physiologically acceptable acid addition salt thereof with a pharmaceutical acceptable carrier for treating microbial infections.

7. A method of treating or preventing microbial infections in a mammal comprising administering to said mammal, the pharmaceutical composition according to claim 6.

8. The method according to claim 7 wherein the microbial infections are caused by gram-positive and gram-negative bacteria.

9. The method according to claim 8 wherein the gram-positive bacteria are selected from the group consisting of staphylococcus spp., streptococuus spp., bacillus spp., corynebacterum spp., clostridia spp., peptostreptococus spp., listeria spp. and legionella spp.

10. A method of treating or preventing aerobic and anaerobic bacterial infections in a mammal comprising administering to said mammal, a therapeutically effective amount of a compound having the structure of Formula I



FORMULA I

and its pharmaceutically acceptable salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs or metabolites, wherein

T is five membered (un)substituted heterocyclic ring with exclusively one heteroatom, selected from oxygen, nitrogen and sulphur; aryl, substituted aryl, bound to the ring C including aryl and five membered hetero aryl which are further substituted by a group represented by R, wherein R is selected from the group consisting of H, CHO, C_{1-6} alkyl, F, Cl, Br,I, –CN, COR_5,$COOR_5$, $N(R_6,R_7)$, $NHCOC(R_8, R_9, R_{10})$, $NHCOOR_{10}$, CON (R_6, R_7), CH_2NO_2, NO_2, $CH(OAc)_2$,

CH_2R_8, CHR_9, -CH = N-OR_{10}, -C=CH-R_5, OR_5, SR_5, -$C(R_9)$=$C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_4, SR_4; wherein R_4 and R_5 are independently selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6 and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$; R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl;

n is an integer in the range from 0 to 3;

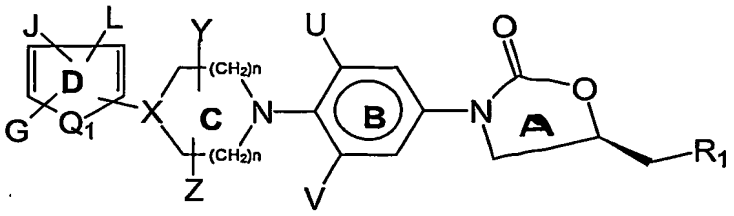
X is C, CH, CH-S, CH-O, N, $CHNR_{11}$, $CHCH_2NR_{11}$, CCH_2NR_{11}, wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

Y and Z are independently selected from hydrogen, C_{1-6} alkyl, C_{3-12} and cycloalkyl C_{0-3} bridging groups;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, preferably U and V are hydrogen or fluoro;

R_1 is selected from the group consisting of -NHC(=O)R_2, $N(R_3, R_4)$, -$NR_2C(=S)$ R_3, -$NR_2C(=S)SR_3$, wherein R_2 is hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH; R_3,R_4 are independently selected from hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH.

11. A method of treating or preventing aerobic and anaerobic bacterial infections in a mammal comprising administering to said mammal, a therapeutically effective amount of a compound having the structure of Formula II:



FORMULA – II

and its pharmaceutically acceptbale salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs or metabolites, wherein

R_1 is selected from the group consisting of (1) $-NHC(=O)R_2$; (2) $-N(R_3, R_4)$; (3) $-NR_2C(=S)R_3$; (4) $-NR_2C(=S)SR_3$ wherein R_2, R_3, R_4 are independently hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted one or more of F, Cl, Br, I, OH;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I;

Y and Z are independently selected from (1) hydrogen, (2) C_{1-6} alkyl, (3) C_{3-12} cycloalkyl (4) C_{0-3} bridging group;

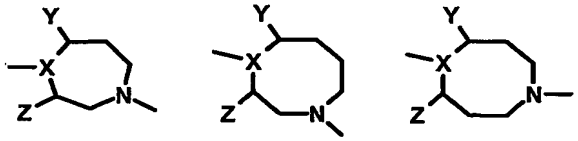
X is selected from C, CH, CH-S, CH-O, N, $CHNR_{11}$, $CHCH_2NR_{11}$, CCH_2NR_{11}; wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

Q_1 is selected from O, S, NR_{11}, wherein R_{11} is as defined above;

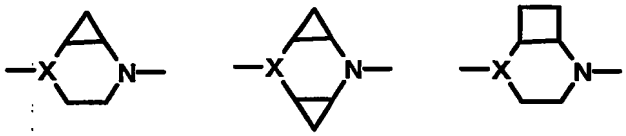
G, J, L are independently selected from H, C_{1-6} alkyl, F, Cl, Br,I, –CN, COR_5,$COOR_5$, $N(R_6,R_7)$, $NHCOC(R_8, R_9, R_{10})$, $CON(R_6, R_7)$, $NHCOOR_{10}$, CH_2NO_2, NO_2, CH_2R_8, CHR_9, $-CH=N-OR_{10}$, $-C=CH-R_5$, OR_5, SR_5, $-C(R_9)=C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_4, SR_4; wherein R_5 is selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6

and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$; R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl.

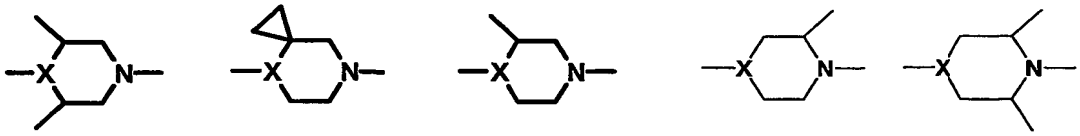
12. The method of treating or preventing aerobic and anaerobic bacterial infections of claim 11, wherein ring C is 6-8 membered in size or of larger size and the larger rings have either two or three carbons between each nitrogen atom, comprising of:



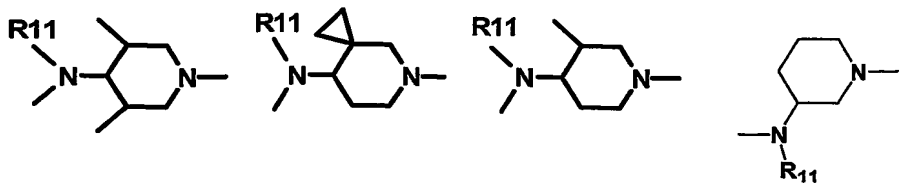
and may be bridged to form a bicyclic system as shown below,

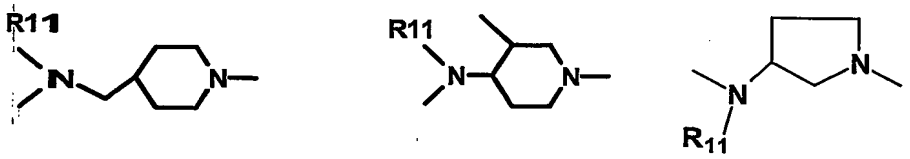


ring C optionally substituted at positions Y and Z with alkyl groups, cycloalkyl groups, fluoro group, carboxylic and corresponding esters, amides, substituted alkyls or bridging alkyl groups as shown below:



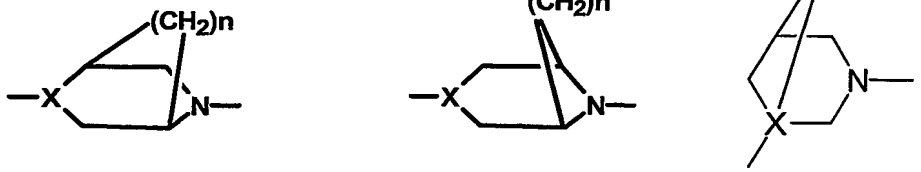
or ring C is 6 membered in size and X is -CH-(NHR_{11}), or >CCH_2NHR_{11}- which is selected from the group consisting of the following rings wherein R_{11} is the same as defined earlier,

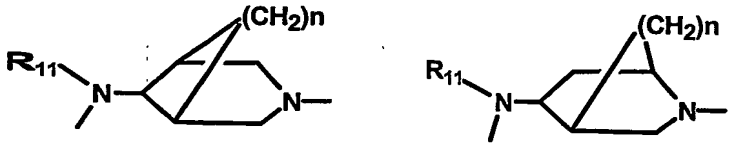


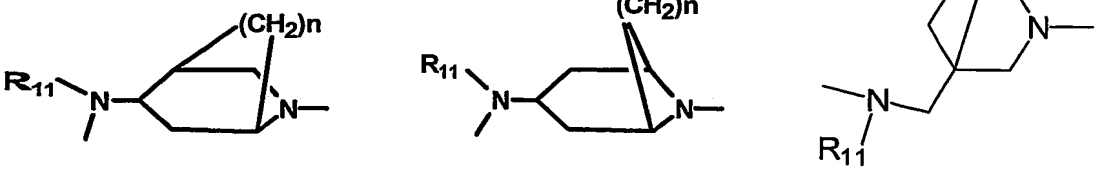


or

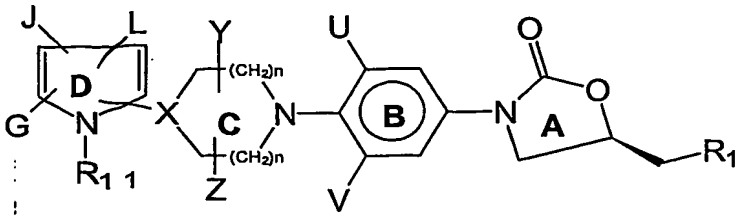
in addition to the above, ring C includes the following structures:



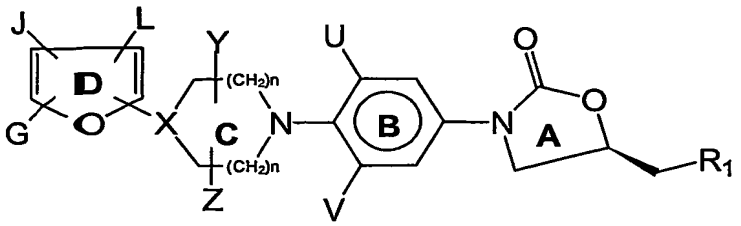




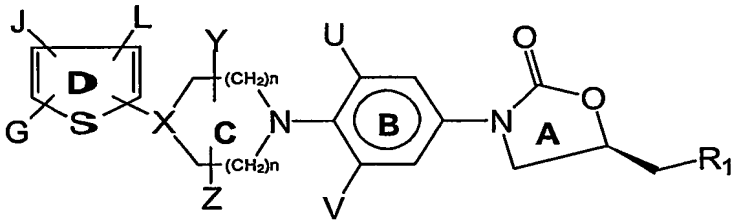
when Q_1=NR_{11}, O or S, the structures are represented by Formulae III, IV and V, respectively,



FORMULA III



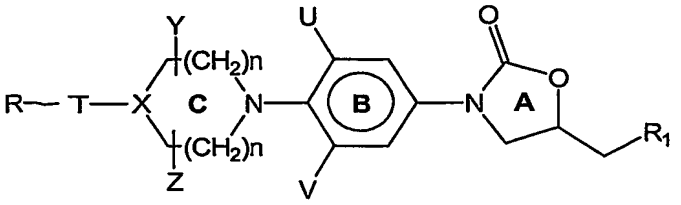
FORMULA IV



FORMULA V

wherein R_1, R_{11}, U, V, X, Y, Z, G, J, L and n in Formula III, Formula IV and Formula V are the same as defined earlier for Formula II.

13. A method of treating or preventing catheter infections and foreign body or prostheses infections in a mammal comprising administering to said mammal, a therapeutically effective amount of a compound having the structure of Formula I.



FORMULA I

and its pharmaceutically acceptable salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs or metabolites, wherein

T is five membered (un)substituted heterocyclic ring with exclusively one heteroatom, selected from oxygen, nitrogen and sulphur; aryl, substituted aryl, bound to the ring **C** including aryl and five membered heteroaryl which are further substituted by a group represented by **R**, wherein R is selected from the group consisting of H, CHO, C_{1-6} alkyl, F, Cl, Br,I, –CN, COR_5,$COOR_5$, $N(R_6,R_7)$, $NHCOC(R_8, R_9, R_{10})$, $NHCOOR_{10}$, $CON(R_6, R_7)$, CH_2NO_2, NO_2, $CH(OAc)_2$, CH_2R_8, CHR_9, -CH = N-OR_{10}, -C=CH-R_5, OR_5, SR_5, $-C(R_9)=C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_4, SR_4; wherein R_4 and R_5 are independently selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6 and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$; R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl;

n is an integer in the range from 0 to 3;

X is C, CH, CH-S, CH-O, N, $CHNR_{11}$, $CHCH_2NR_{11}$, CCH_2NR_{11}; wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

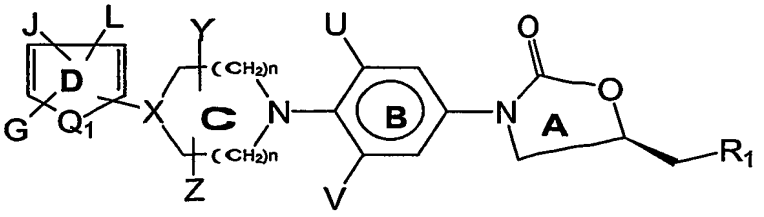
Y and Z are independently selected from hydrogen, C_{1-6} alkyl, C_{3-12} and cycloalkyl C_{0-3} bridging groups;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, preferably U and V are hydrogen or fluoro;

R_1 is selected from the group consisting of -NHC(=O)R_2, $N(R_3, R_4)$, $NR_2C(=S)R_3$, $-NR_2C(=S)SR_3$, wherein R_2 is hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or

OH; R_3,R_4 are independently selected from hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH.

14. A method of treating or preventing catheter infections and foreign body or prothesis infections in a mammal comprising administering to said mammal, a therapeutically effective amount of a compound having the structure of Formula II:



FORMULA – II

and its pharmaceutically acceptbale salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs or metabolites, wherein

R_1 is selected from the group consisting of (1) –NHC(=O)R_2; (2) -N(R_3, R_4); (3) –NR_2C(=S)R_3; (4) –NR_2C(=S)SR_3 wherein R_2, R_3, R_4 are independently hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted one or more of F, Cl, Br, I, OH;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I;

Y and Z are independently selected from (1) hydrogen, (2) C_{1-6} alkyl, (3) C_{3-12} cycloalkyl (4) C_{0-3} bridging group;

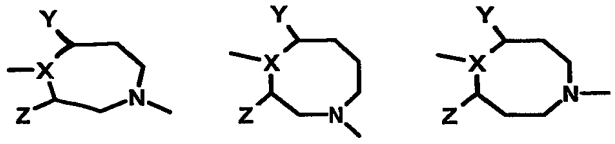
X is selected from C, CH, CH-S, CH-O, N, CHNR_{11}, CHCH_2NR_{11}, CCH_2NR_{11}; wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

Q_1 is selected from O, S, NR_{11}, wherein R_{11} is as defined above;

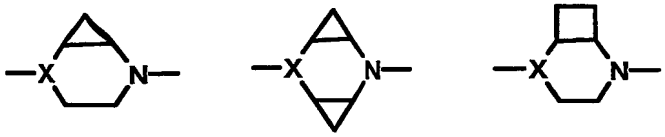
G, J, L are independently selected from H, C_{1-6} alkyl, F, Cl, Br,I, –CN, COR_5,$COOR_5$, N(R_6,R_7), NHCOC(R_8, R_9, R_{10}), CON (R_6, R_7), $NHCOOR_{10}$,

CH_2NO_2, NO_2, CH_2R_8, CHR_9, -CH = N-OR_{10}, -C=CH-R_5, OR_5, SR_5, -$C(R_9)=C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_4, SR_4; wherein R_5 is selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6 and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$;, R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl or heteroaryl.

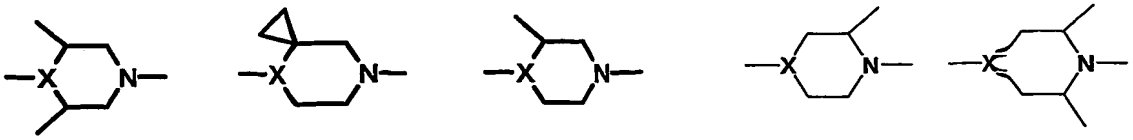
15. A method of treating or preventing catheter infections and foreign body or prothesis infections in a mammal comprising administering to said mammal, a therapeutically effective amount of a compound having the structure of Formula II as defined in claim 14 wherein ring C is 6-8 membered in size or of larger size and the larger rings have either two or three carbons between each nitrogen atom, comprising of:



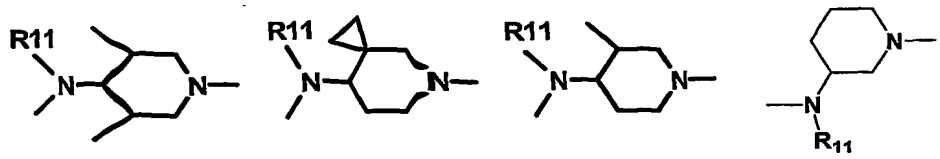
and may be bridged to form a bicyclic system as shown below,

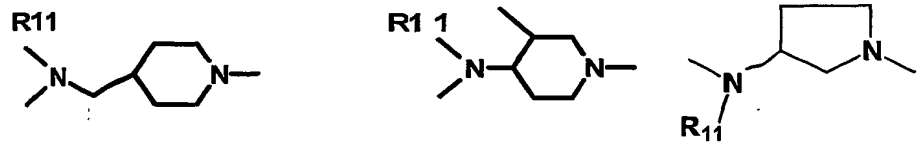


ring C optionally substituted at positions Y and Z with alkyl groups, cycloalkyl groups, fluoro group, carboxylic and corresponding esters, amides, substituted alkyls or bridging alkyl groups as shown below:



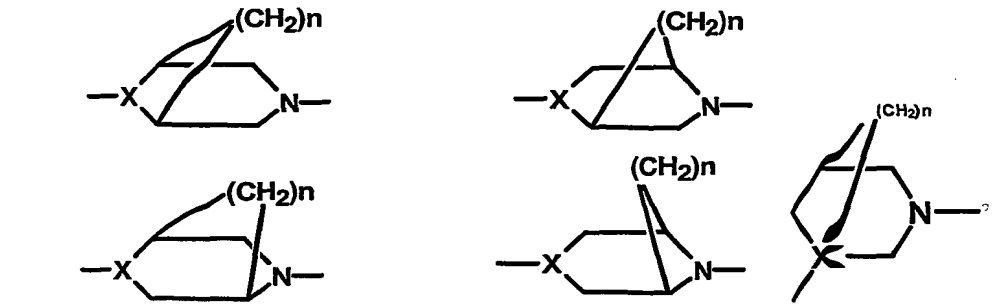
or ring C is 6 membered in size and X is -CH-(NHR_{11}), or >CCH_2NHR_{11}- which is selected from the group consisting of the following rings wherein R_{11} is the same as defined earlier,

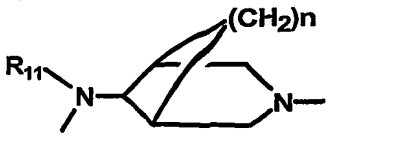


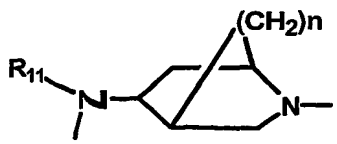


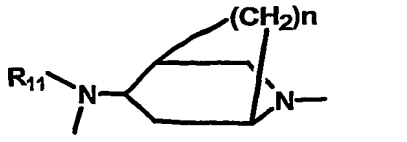
or

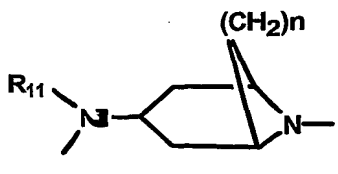
in addition to the above, ring C includes the following structures:

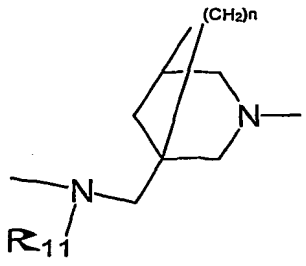




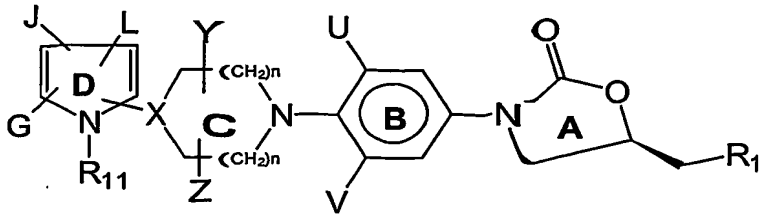




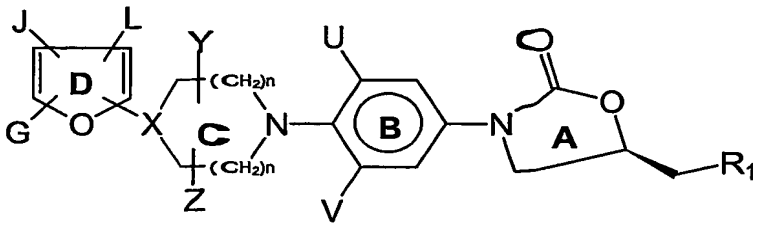




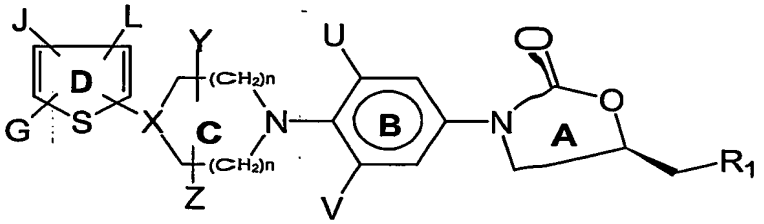
when Q_1=NR_{11}, O or S, the structures are represented by Formulae III, IV and V, respectively,



FORMULA III



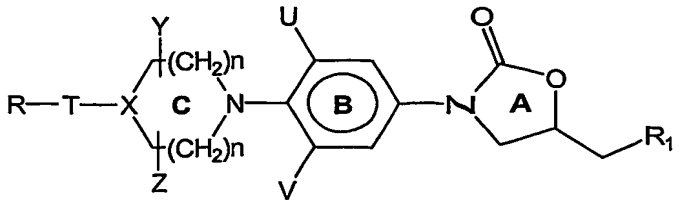
FORMULA IV



FORMULA V

wherein R_1, R_{11}, U, V, X, Y, Z, G, J, L and n in Formula III, Formula IV and Formula V are the same as defined earlier for Formula II.

16. A process for preparing a compound of Formula I



FORMULA I

and its pharmaceutically acceptable salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs or metabolites, wherein

T is five membered (un)substituted heterocyclic ring with exclusively one heteroatom, selected from oxygen, nitrogen and sulphur; aryl, substituted aryl, bound to the ring **C** including aryl and five membered heteroaryl which are further substituted by a group represented by **R**, wherein R is selected from the group consisting of H, CHO, C_{1-6} alkyl, F, Cl, Br,I, –CN, COR_5,$COOR_5$, $N(R_6,R_7)$, $NHCOC(R_8, R_9, R_{10})$, $NHCOOR_{10}$, CON (R_6, R_7), CH_2NO_2, NO_2, $CH(OAc)_2$, CH_2R_8, CHR_9, -CH = N-OR_{10}, -C=CH-R_5, OR_5, SR_5, $-C(R_9)=C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_4, SR_4; wherein R_4 and R_5 are independently selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6 and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$; R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl;

n is an integer in the range from 0 to 3;

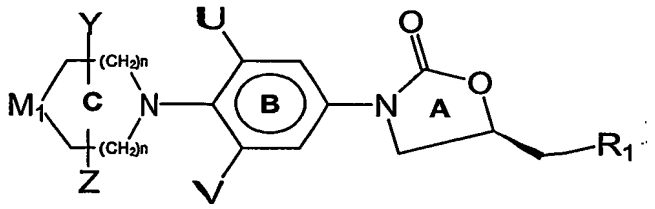
X is C, CH, CH-S, CH-O, N, $CHNR_{11}$, $CHCH_2NR_{11}$, CCH_2NR_{11}; wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

Y and Z are independently selected from hydrogen, C_{1-6} alkyl, C_{3-12} and cycloalkyl C_{0-3} bridging groups;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, preferably U and V are hydrogen or fluoro;

R_1 is selected from the group consisting of -NHC(=O)R_2, N(R_3, R_4), -$NR_2C(=S)$ R_3, -$NR_2C(=S)SR_3$, wherein R_2 is hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH; R_3,R_4 are independently selected from hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH;

which comprises reacting an amine of Formula VI

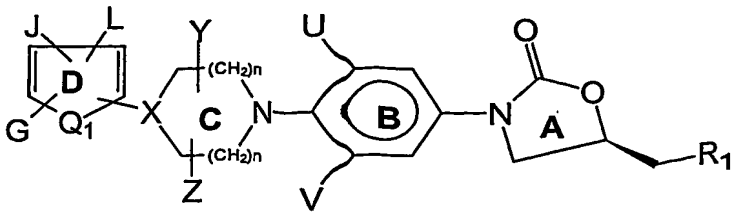


FORMULA VI

with a heteroaromatic compound of Formula R-T-R_{12} wherein T, R_1, Y, Z, U, V and n are the same as defined earlier and M_1 is selected from the group consisting of NH, NHR, CHNHR, -$CHCH_2NHR$, -CCH_2NHR wherein R is H, ethyl, methyl, isopropyl, acetyl, cyclopropyl, alkoxy or acetyl and R_{12} is a suitable leaving group selected from the group consisting of fluoro, chloro, bromo, iodo, SCH_3, -SO_2CH_3, -SO_2CF_3, Tos and OC_6H_5.

17. The process of claim 16, wherein the amine of Formula VI reacts with a heteroaromatic compound of Formula R-T-R_{12} in the presence of a base selected from the group consisting of potassium carbonate, N-ethyldiisopropylamine and dipotassium hydrogenphosphate.

18. A process for preparing a compound of Formula II



FORMULA – II

and its pharmaceutically acceptbale salts, solvates, polymorphs, enantiomers, diastereomers, N-oxides, prodrugs or metabolites, wherein

R_1 is selected from the group consisting of (1) $-NHC(=O)R_2$; (2) $-N(R_3, R_4)$; (3) $-NR_2C(=S)R_3$; (4) $-NR_2C(=S)SR_3$ wherein R_2, R_3, R_4 are independently hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted one or more of F, Cl, Br, I, OH;

U and V are independently selected from hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I;

Y and Z are independently selected from (1) hydrogen, (2) C_{1-6} alkyl, (3) C_{3-12} cycloalkyl (4) C_{0-3} bridging group;

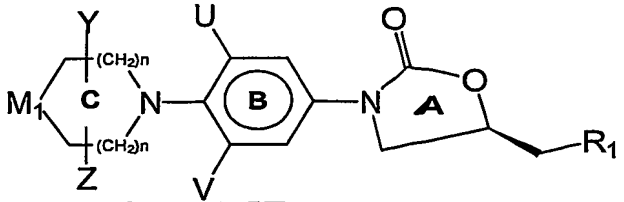
X is selected from C, CH, CH-S, CH-O, N, $CHNR_{11}$, $CHCH_2NR_{11}$, CCH_2NR_{11}; wherein R_{11} is hydrogen, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkylcarbonyl, C_{1-6} alkylcarboxy, aryl, heteroaryl;

Q_1 is selected from O, S, NR_{11}, wherein R_{11} is as defined above;

G, J, L are independently selected from H, C_{1-6} alkyl, F, Cl, Br,I, –CN, COR_5,$COOR_5$; $N(R_6,R_7)$, $NHCOC(R_8, R_9, R_{10})$, $CON(R_6, R_7)$, $NHCOOR_{10}$, CH_2NO_2, NO_2, CH_2R_8, CHR_9, -CH = N-OR_{10}, -C=CH-R_5, OR_5, SR_5, -$C(R_9)=C(R_9)NO_2$, C_{1-12} alkyl substituted with one or more F, Cl, Br, I, OR_4, SR_4; wherein R_5 is selected from H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH, aryl, heteroaryl; R_6 and R_7, are independently selected from H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from H, C_{1-6} alkyl, F, Cl, Br, I,

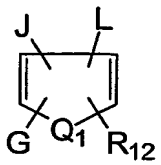
C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR_5, SR_5, $N(R_6,R_7)$; R_{10}= H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl;

comprising reacting a compound of Formula VI



Formula VI

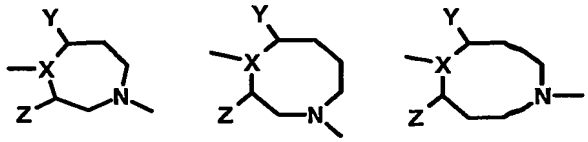
with a heteroaromatic compound of Formula VII



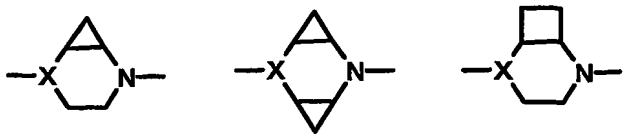
Formula VII

wherein R_1, Y, Z, U, V, G, J, L, Q_1, and n are the same as defined earlier and M_1 is selected from the group consisting of NH, NHR, CHNHR, -$CHCH_2NHR$, -CCH_2NHR wherein R is H, ethyl, methyl, isopropyl, acetyl, cyclopropyl, alkoxy or acetyl and R_{12} is a suitable leaving group selected from the group consisting of fluoro, chloro, bromo, iodo, SCH_3, -SO_2CH_3, -SO_2CF_3, Tos and OC_6H_5.

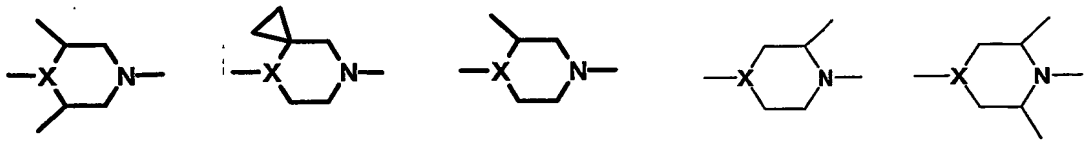
19. The process for preparing a compound of Formula II as described in claim 18 wherein ring C in Formula II is 6-8 membered in size or of larger size and the larger rings have either two or three carbons between each nitrogen atom, comprising of:



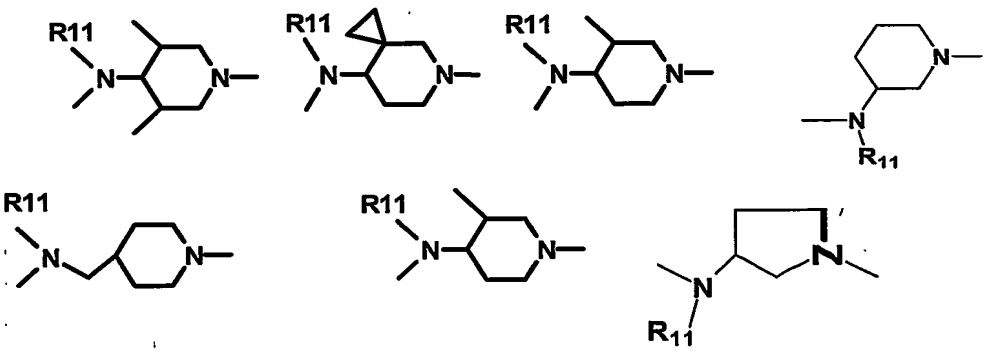
and may be bridged to form a bicyclic system as shown below,



ring C optionally substituted at positions Y and Z with alkyl groups, cycloalkyl groups, fluoro group, carboxylic and corresponding esters, amides, substituted alkyls or bridging alkyl groups as shown below:

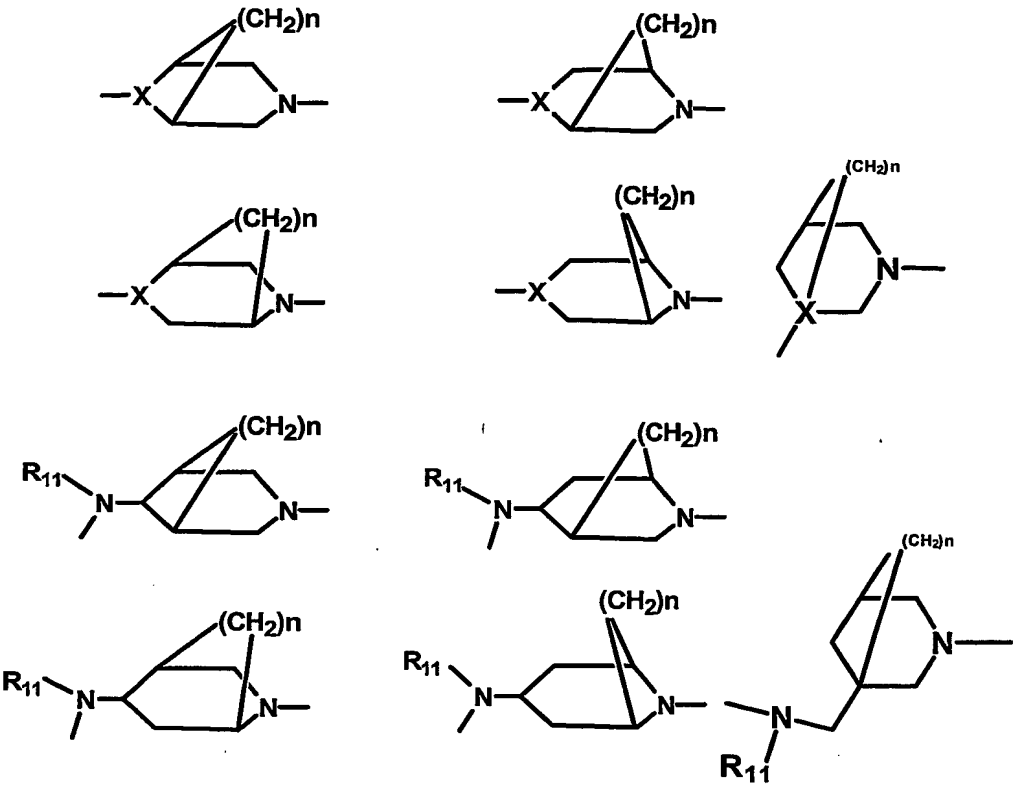


or ring C is 6 membered in size and X is -CH-(NHR_{11}), or >CCH_2NHR_{11}- which is selected from the group consisting of the following rings wherein R_{11} is the same as defined earlier,

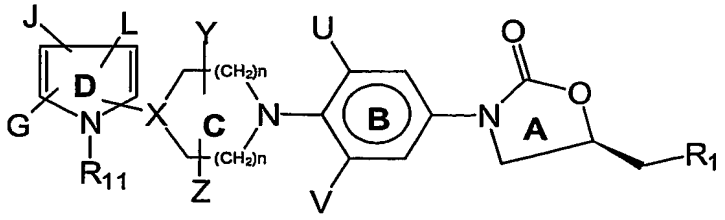


or

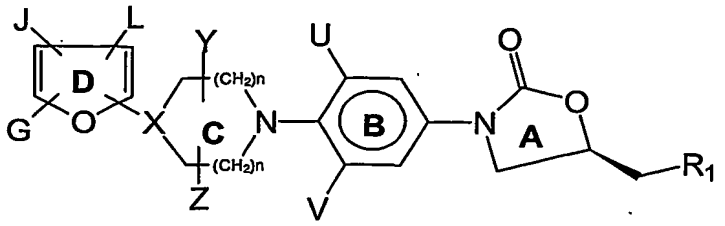
in addition to the above, ring C includes the following structures:



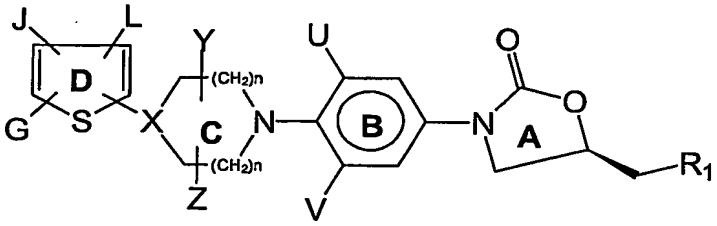
when Q_1=NR_{11}, O or S, the structures are represented by Formulae III, IV and V, respectively,



FORMULA III



FORMULA IV



FORMULA V

wherein R_1, R_{11}, U, V, X, Y, Z, G, J, L and n in Formula III, Formula IV and Formula V are the same as defined earlier for Formula II.

20. The process of claim 18 wherein the heteroaromatic compound of Formula VII is reacted with the amine of Formula VI in the presence of ligands selected from the group consisting of $Pd_2(dba)_3$ and $Pd(OAc)_2$.

21. The process of claim 18 wherein the heteroaromatic compound of Formula VII is 2-bromothiophene.

22. The process of claim 18 wherein the reaction of compound of Formula VI with a compound of Formula VII is carried out in the presence of a solvent wherein the solvent is selected from the group consisting of dimethylformamide, dimethylacetamide, acetanitrile, dimethylsulfoxide and ethylene glycol.

23. The process of claim 18 wherein the reaction of compound of Formula VI with a compound of Formula VII is carried out in the presence of a suitable base wherein the base is selected from the group consisting of triethylamine diisopropylethylamine, potassium carbonate, sodium carbonate and dipotassium hydrogen phosphate.